

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

WT Docket No. 00-230

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Federal Communications Commission
Office of the Secretary

In the Matter of

Promoting Efficient Use of Spectrum
Through Elimination of Barriers to the
Development of Secondary Markets

COMMENTS OF CINGULAR WIRELESS LLC

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To: The Commission

COMMENTS OF CINGULAR WIRELESS LLC

Cingular Wireless LLC ("Cingular"), through undersigned counsel, hereby comments in response to the *Second FNPRM*¹ released September 4, 2004. The *Second FNPRM* seeks comment on the use of a "private commons" secondary markets approach to promote more efficient use of licensed spectrum. For the reasons set forth below, Cingular believes that a "private commons" approach to secondary markets in the Commercial Mobile Radio Service ("CMRS") spectrum bands holds promise, and the Commission should give the "private commons" approach an opportunity to develop in the marketplace before adopting additional rules.

On November 9, 2000, the Commission adopted a *Policy Statement* setting forth its plans to facilitate secondary market transactions by which Commission licensees could make licensed spectrum available to other entities and for other uses.² On the same day, the Commission adopted a *Notice of Proposed Rulemaking* to remove barriers to

¹ Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, *Second Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking*, FCC 04-167, released September 2, 2004 ("*Second Report and Order*" and "*Second FNPRM*").

² Principles for Promoting Efficient Use of Spectrum By Encouraging the Development of Secondary Markets, *Policy Statement*, 15 FCC Rcd 24178 (2000).

spectrum leasing and to increase flexibility in the technical and service rules governing most Wireless Radio Services.³

On May 15, 2003, the Commission adopted a *Report and Order and Further Notice of Proposed Rulemaking* in this docket.⁴ In that order, the Commission established different types of spectrum leasing arrangements that can be entered into by licensees and spectrum users and adopted streamlined approval procedures for license assignments and transfers of control. In the *Further Notice*, the Commission sought comment on steps that it might take to facilitate secondary market transactions between current "exclusive use" licensees and operators of opportunistic devices that may make more intensive and efficient use of spectrum.⁵

In the *Second Report and Order* the Commission made clear that it was seeking to facilitate cooperative approaches to the opportunistic use of spectrum, i.e., that licensees and spectrum lessees should agree on the terms and conditions under which opportunistic devices could operate in licensed spectrum with due respect to avoiding harmful interference to other licensees.⁶ The Commission clarified that parties are free under the current rules to enter into dynamic leasing arrangements under which licensees and spectrum lessees share use of the same spectrum, on a non-exclusive basis, during the term of the lease.⁷ Cingular appreciates this clarification. As Cingular and others noted in their comments, such cooperative arrangements allow licensees to expand the use of licensed spectrum while maintaining control of the radio environment in its licensed

³ Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, *Notice of Proposed Rulemaking*, 15 FCC Rcd 24203 (2000).

⁴ Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, *Report and Order and Further Notice of Proposed Rulemaking*, 18 FCC Rcd 24817 (2003).

⁵ *Id.*, ¶¶ 233-236.

⁶ *Second Report and Order* ¶¶ 86-87.

⁷ *Second Report and Order* ¶ 88.

band. As Cingular noted in its comments, licensee control of the operating parameters of opportunistic devices sharing the licensed band is the only way to ensure that such devices meet the service and technical rules of the band and do not cause harmful interference to co-channel operations and adjacent licensees.⁸

The *Second Report and Order* also introduced the concept of a “private commons.” The Commission defines the “private commons” as an access arrangement in which spectrum is made available to individual users or groups of users to “permit, and be restricted to, peer-to-peer communications between devices in a non-hierarchical network arrangement that does not utilize the network infrastructure of the licensee (or spectrum lessee).”⁹ The Commission makes it clear that the licensee or spectrum lessee, as manager of the private commons, will set terms and conditions for use of the spectrum, consistent with the terms of the license and the applicable service rules. The licensee or lessee will retain *de facto* control on the use of the spectrum within the private commons. This is essential because it allows licensees to control the radio environment in its licensed band in order to ensure its own services are not subjected to harmful interferences. In addition, the Commission will hold the licensee or lessee responsible for compliance with the Commission’s rules.¹⁰

The “private commons” concept seems best suited to unlicensed fixed wireless applications in licensed bands. Although the opportunistic device will, by Commission definition,¹¹ not utilize the licensee or lessee network facilities, it may be possible to establish a communications link between the licensee and the fixed system, e.g., a

⁸ Cingular Comments in Response to Further Notice of Proposed Rulemaking at 8.

⁹ *Second Report and Order* ¶ 91.

¹⁰ *Second Report and Order* ¶ 94.

¹¹ See *Second Report and Order*, Appendix C, page 16 for final Rule 1.9080.

dedicated link, that would allow the licensee to exercise some physical control over the opportunistic device. However, in a mobile environment, this physical control is not possible. The only “control” that the licensee or lessee will have over mobile users of the private commons is through contractual arrangements and the rules established for its use. For example, the contract would limit the use of the device specifically to the geographic area (limited to the license area) in which a mobile device is authorized to operate. If a user operates the device outside the authorized geographic area and causes harmful interference to an adjacent licensee, will the Commission hold the licensee or lessee responsible for the interference? If so, the risk of establishing a “private commons” may exceed any potential benefit. The Commission should clarify that it will evaluate rule compliance by the licensee or lessee based on the terms and conditions established for operation within the “private commons” and that non-compliance with these provisions by a user of the private commons will not result in liability to the licensee or lessee. In the absence of a technological means of physically shutting down a non-compliant device, the Commission should define *de facto* control as the establishment of an appropriate set of terms and conditions for operation within the “private commons.”¹²

Under Section 1.9080 of the Rules, in certain situations the spectrum licensee or lessee may have no privity of contract with users operating within the “private commons” and no physical control over the opportunistic devices employed by the user.¹³ Yet the rule rightly charges the licensee or lessee with “maintaining reasonable oversight over the users’ use of the spectrum in the private commons so as to ensure that the use of the

¹² *Second FNPRM* ¶¶ 160, 164.

¹³ See, e.g. the type of “private commons” arrangement contemplated in *Second Report and Order* ¶ 96.

spectrum, and communications equipment employed, comply with all applicable technical and service rules (including requirements relating to radiofrequency radiation) and maintaining the ability to ensure such compliance.”¹⁴ The rule also states that the licensee or lessee:

Retains direct responsibility for ensuring that the users of the private commons, and the equipment employed, comply with all applicable technical and service rules, including requirements relating to radiofrequency radiation and requirements relating to interference.¹⁵

For unlicensed devices operating under Part 15 of the Rules, the Commission relies on the equipment authorization process to place on device manufacturers the burden of ensuring compliance with the Commission’s radiofrequency and other technical rules. The Commission should follow the same approach with regard to the opportunistic devices using a “private commons”. If the licensee includes adequate technical and operational standards in the terms and conditions governing the “private commons”, that should be deemed by the Commission to constitute compliance by the licensee with the proposed rules.

The Second FNPRM asks whether the Commission should adopt additional rules to further define the “private commons” concept. The Commission suggests, for example, that it may be necessary to require users to employ smart devices that include technologies that would enable private commons managers to shut down any device found to be causing harmful interference.¹⁶ While this requirement may be beneficial, and indeed necessary, Cingular views the adoption of additional rules at this time to be premature. The “private commons” concept is new and the development of opportunistic

¹⁴ 47 C.F.R. § 1.9080(b)(2).

¹⁵ 47 C.F.R. § 1.9080(b)(3).

¹⁶ *Second FNPRM* at ¶ 164.

devices that would be utilized in a "private commons" arrangement just now being conceptualized. If the private commons concept is a viable secondary market opportunity, licensees and equipment manufacturers will need to collaborate on ways to implement the concept within the scope of the Commission's rules. Adoption of additional rules at this time could thwart, rather than promote, the evolution of the "private commons" concept. For example, the requirement suggested in the *Second FNPRM* and discussed above that a microchip be included in opportunistic devices to facilitate shutting down interfering devices by the private commons manager might add costs to the devices that exceed what the market will bear, yet it might also be the only way for a licensee to ensure its services are not subjected to harmful interference. Licensees and equipment manufacturers interested in the "private commons" concept should be given time to explore this and other means of enabling "private commons" managers to ensure compliance with the Commission's rules. Cingular therefore recommends that the Commission not adopt additional rules until the market has had a chance to evolve and identify any required rule amendments.

Respectfully submitted,

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January 17, 2005

CERTIFICATE OF SERVICE

I, Lydia Byrd, an employee in the Legal Department of Cingular Wireless LLC, hereby certify that on this 18th day of January, 2005, courtesy copies of the foregoing Comments of Cingular Wireless were sent via first class mail, postage prepaid to the following:

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In addition, the document was filed electronically in the Commission's Electronic Comment Filing System on the FCC website.

s/ Lydia Byrd
Lydia Byrd